WHAT IS CLAIMED IS:

1. A method of part flow model for a programmable logic controller logical verification system, said method comprising the steps of:

constructing a part flow model;

determining whether the part flow model is acceptable; and

using the part flow model to test PLC code to build a manufacturing line.

2. A method as set forth in claim 1 wherein said step of constructing comprises selecting a part generator.

3. A method as set forth in claim 2 wherein said step of constructing further comprises generating a part with the part generator.

4. A method as set forth in claim 3 wherein said step of constructing further comprises moving the generated part to a location.

5. A method as set forth in claim 4 wherein said step of constructing further comprises testing the generated part at the part location.

6. A method as set forth in claim 1 wherein said step of constructing comprises constructing a record for the part.

7. A method as set forth in claim 6 wherein the record has at least one resource.

8. A method as set forth in claim 7 wherein the at least one resource has at least one capability.

9. A method as set forth in claim 1 including the step of generating PLC code if the part flow model is acceptable.

10. A method as set forth in claim 1 including the step of modifying the part flow model if the part flow model is not acceptable.

11. A method as set forth in claim 1 wherein said step of constructing further comprises playing the part flow model by a PLC logical verification system.

12. A method for application of a part flow model for a programmable logic controller logical verification system, said method comprising the steps of:

constructing a part flow model;

playing the part flow model by a PLC logical verification system;

determining whether the part flow model is acceptable;

testing PLC code if the part flow model is acceptable; and

using the tested PLC code to build a manufacturing line.

13. A method as set forth in claim 12 wherein said step of constructing comprises selecting a part generator.

14. A method as set forth in claim 13 wherein said step of constructing further comprises generating a part with the part generator.

15. A method as set forth in claim 14 wherein said step of constructing further comprises moving the generated part to a location.

16. A method as set forth in claim 15 wherein said step of constructing further comprises testing the generated part at the part location.

17. A method as set forth in claim 12 wherein said step of constructing comprises constructing a record for the part.

18. A method as set forth in claim 17 wherein the record has at least one resource.

19. A method as set forth in claim 18 wherein the at least one resource has at least one capability.

20. A method as set forth in claim 1 including the step of modifying the part flow model if the part flow model is not acceptable.

21. A method for application of a part flow model for a programmable logic controller logical verification system, said method comprising the steps of:

constructing a part flow model by selecting a part generator, generating a part with the part generator, and moving the generated part to a location;

playing the part flow model by a PLC logical verification system;

determining whether the part flow model is acceptable;

modifying the part flow model if the part flow model is not acceptable;

testing PLC code if the part flow model is acceptable; and

using the tested PLC code to build a manufacturing line.